HOUSTON COMMUNITY COLLEGE SYSTEM

COURSE SYLLABUS: CRN 70410

MATH 0308: FUNDAMENTALS OF MATHEMATICS II

Instructor: Jack Hatton

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Math Office Phone: 713.718.2434

Office Hours: By Appointment

Location: Northline Campus

Semester: Spring 2011

Catalog Description: 3 semester credit hours (3 lecture)

Topics include real numbers, basic geometry, polynomials, factoring, linear equations, inequalities, quadratic equations and rational expressions. A departmental final examination must be passed in order to pass the course.

Prerequisite: Math 0306 (pass with "C" or better) or equivalent test score
SAT(Math)Score: 450 – 499
ASSET Number Skill Raw Score: 19+, Scaled Score: 42+
ASSET Elementary Algebra Raw Score: 0 - 13, Scaled Score: 23 – 44

Textbook: Prealgebra and Introductory Algebra, 2nd Edition. Bittinger, Marvin L. & Ellenbogen,
David J. Pearson /Addison Wesley: Boston, 2008.

MyMathLab CourseID: Hatton84756

Course Intent: This course provides students with the basic arithmetical skills enabling them to proceed to the next level mathematics course. It is also designed to strengthen many of the skills that an individual must demonstrate or master in order to pass the mandatory TASP Test. It is also intended for those students who are reasonably adept at performing the simple mathematical operations needed in every day affairs, but become confused when confronted with the same operations in the context of a mathematics class.

Audience: This course is for students who require state mandated remediation.

Americans with Disabilities Act (ADA): The Houston Community College System is committed to providing the least restrictive learning environment for all students. HCCS promotes equity in academic access through the implementation of reasonable accommodations as required by the Vocational Rehabilitation Act of 1973, Title V, Section 504 and the Americans with Disabilities Act of 1990 (ADA) which will enable students with disabilities to participate in and benefit from all postsecondary educational activities. Students needing accommodations due to a documented disability should contact the ADA counselor for their

college at the beginning of the semester. The faculty is authorized to provide only the accommodations requested by the Disability Support Services Office.

Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc) who needs to arrange reasonable accommodations must contact the appropriate HCC Disability Support Service (DSS) Counselor at the beginning of each semester. **Instructors are authorized to provide only the HCC DSSO approved accommodations but must do so in a timely manner.**

Students who are requesting special testing accommodations must first contact the appropriate (most convenient) DSS office for assistance each semester:

DISABILITY SUPPORT SERVICES OFFICES:

System: 713.718.5165

Central: 713.718.6164 – *also for Deaf and Hard of Hearing Services and Students Outside of the HCC District service areas.*

Northwest: 713.718.5422

Northeast: 713.718.8420

Southeast: 713.718.7218

Southwest: 713.718.7909

After student accommodation letters have been approved by the DSS office and submitted to DE Counseling for processing, students will receive an email confirmation informing them of the Instructional Support Specialist (ISS) assigned to their professor.

New DE Student User ID
Your Blackboard login user ID will be your HCC User ID (sometimes referred to as the "W" number). All HCC students have a unique User ID. If you do not know your User ID you can look it up by visiting the HCC home page:

- From www.hccs.edu, under the column "CONNECT", click on the "Student System Sign In" link
- Then click on "Retrieve User ID" and follow the instructions.

Or use the direct link to access the Student Sign In page:
https://hccsaweb.hccs.edu:8080/psp/csprd/?cmd=login&languageCd=ENG

The default student password is "distance." Students will then be prompted to change their password after their first login. Please visit the Distance Education (DE) Technical Support website if you need additional assistance with your login.

Class Attendance:

As stated in the HCC Catalog, all students are expected to attend classes regularly. Students in DE courses must log in to their Blackboard class or they will be counted as absent. Just like an on-campus class, your regular participation is required.

Although it is the responsibility of the student to drop a course for non-attendance, the instructor also has the authority to block a student from accessing Blackboard, and/or to drop a student for excessive absences or failure to participate regularly. DE students who do not log in to their Blackboard class before the Official Day of Record will be AUTOMATICALLY dropped for non-attendance. Completing the DE online orientation does not count as attendance.

Notice For Students Outside Of HCC Service Area: Proctoring

Students who live or work outside the HCC service area and cannot take paper exams at one of our HCC testing locations **MUST** make arrangements for a proctor. For more information and to complete the required Proctor Approval Form, please visit de.hccs.edu.

HCC Course Withdrawal Policy (updated 7/26/2010)

Beginning Fall 2007, the State of Texas imposes penalties on students who drop courses excessively. Students are limited to no more than SIX total course withdrawals throughout their educational career at a Texas public college or university.

To help you avoid having to drop/withdraw from any class, contact your DE professor regarding your academic performance. You may also want to contact your DE counselor to learn about helpful HCC resources (e.g. online tutoring, child care, financial aid, job placement, etc.).

How To Drop A Class:

- **If a student decides to drop or withdraw from a class upon careful review of other options, the student can drop online prior to the deadline through their HCC Student Center.**
- **HCC and/or instructors may drop students for excessive absences without notification** (see Class Attendance below).
- **Students should check HCC's Academic Calendar by Term for drop/withdrawal dates and deadlines.** Classes of other duration (mini-term, flex-entry, 8-weeks, etc.) may have different final withdrawal deadlines. Please contact the HCC Registrar's Office at 713.718.8500 to determine mini-term class withdrawal deadlines.

Withdrawal Deadline: Thursday, April 14, 2011 at 4:30 pm.

Special Notice: "Students who repeat a course for a third time or more may soon face significant tuition/fee increases at HCC and other Texas public colleges and universities. Please ask your instructor/counselor about opportunities for tutoring or other assistance prior to considering course withdrawal or if you are not receiving passing grades."

Student Handbook

The Distance Education Student Handbook contains policies and procedures unique to the DE student. Students should have reviewed the handbook as part of the mandatory orientation. It is the student's responsibility to be familiar with the handbook's contents. The handbook contains valuable information, answers, and resources, such as DE contacts, policies and procedures (how to drop, attendance requirements, etc.), student services (ADA, financial aid, degree planning, etc.), course information, testing procedures, technical support, and academic calendars. Refer to the DE Student Handbook by visiting this link: http://de.hccs.edu/de/de-student-handbook

Student Learning Outcomes:

1. Identify and apply properties of real numbers, and perform accurate arithmetic operations with numbers in various formats and number systems.

2. Demonstrate the ability to manipulate/simplify algebraic expressions, and to classify and solve algebraic equations with appropriate techniques.

3. Demonstrate the use of elementary graphing techniques.

4. Apply basic geometric theorems and formulas to rectangles, squares, parallelograms, triangles, trapezoids, circles, and angles.

Grading Formula: Grades will be determined by the following formula.

Tests-60% Homework-15% Final Exam-25%

Determination of Your Final Grade: There will be 3 or 4 major examinations given in this class plus one comprehensive final examination. Your final course grade is awarded based on the following standard HCCS ten point scale.

Semester Grade

A: 90 ≤ Final Avg. ≤ 100%
B: 80 ≤ Final Avg. < 90%
C: 70 ≤ Final Avg. < 80%
D: 60 ≤ Final Avg. ≤ 69%
F: 0 ≤ Final Avg. ≤ 59%

Final Examination:
The final examination is departmental and consists of 33 multiple-choice problems. The Problems cover all the material required in the course. If you score lower than 60% on the final exam, you automatically get a course grade of D or F, as noted under the grading policy. If your score on the final exam is 60% or higher, then your grades are averaged using the formula specified under grading policy. You **MUST** pass the final exam in order to pass the course.

Calculator Policy: Calculators are **NOT** permitted on any of the exams.

Policy on Late Assignments and Make–Up Exams: All homework assignments will be due on the day of each exam. Also, there will be NO makeup exams. If you miss an exam, the final exam will count twice. It will count once for the missed exam and again for the final exam itself. If you know in advance that you will be absent on an exam day, please let me know as soon as possible.

Virtual Classroom Conduct:

As with on-campus classes, all students in HCC Distance Education courses are required to follow all HCC Policies & Procedures, the Student Code of Conduct, the Student Handbook, and relevant sections of the Texas Education Code when interacting and communicating in a virtual classroom with faculty and fellow students. Students who violate these policies and guidelines will be subject to disciplinary action that could include denial of access to course-related email, discussion groups, and chat rooms or being removed from the class.

How To Improve Your Grade: Always attend class and read the material to be covered in advance. Practice the suggested exercises in the course syllabus. Arrange your study schedule with someone else taking this class if possible, anyone who seems to have a fairly good understanding of the course content. Work in study groups. Take good notes and ask questions about problems that you do not understand in class. Arrange to conference with you instructor about specific problems that you may have. Supplement your efforts by practicing in the Math Lab.

How to Use Your Syllabus:
Your syllabus is designed to provide an interactive learning experience. You may use the MathLab at any HCCS campus to access MyMathLab for tutoring, SMARTTHINKING, and to work on computer supplements that will help you to pass this course. The Section Numbers below refer to topics listed in the table of contents in your textbook. The objectives refer to skills that you are expected to master. Consult the Math Lab personnel to show you how to use MyMathLab and Video Tapes.

Online Tutoring: HCC provides free online tutoring in writing, math, science, and other subjects. How to access AskOnline: Click on the Ask Online button in the upper right corner of the Blackboard course listings page. This directs students to the HCC AskOnline Tutoring site: http://hccs.askonline.net/. Use your student ID or HCC e-mail address to create an account. Instructions, including a 5-minute video, are provided to make you familiar with the capabilities of this service.

Social Networking: DE students are encouraged to become a fan of DE on Facebook http://www.facebook.com/HCCDistanceEd and to follow DE on Twitter: http://twitter.com/HCCDistanceEd
These social networking sites help DE foster student engagement and provide a sense of community for the online learner. Students will also stay informed about important information and announcements.

Library Resources: As a DE student you have the same access to first-rate information resources that the HCC Libraries make available to all HCC students. A special website pulls together all the tools DE students will need to get their research rolling. Visit Library Resources specifically for Distance Education students.

Course Content:

(Topics will not be covered in this order)

Chapter 8: Geometry

8.1 Basic Geometric Figures
8.2 Perimeter
8.3 Area
8.4 Circles
8.5 Volume and Surface Area
8.6 Relationships Between Angle Measures
8.7 Congruent Triangles and Properties of Parallelograms
8.8 Similar Triangles

Chapter 9: Introduction to Real Numbers and Algebraic Expressions

9.1 Introduction to Algebra
9.2 The Real Numbers
9.3 Addition of Real Numbers
9.4 Subtraction of Real Numbers
9.5 Multiplication of Real Numbers
9.6 Division of Real Numbers
9.7 Properties of Real Numbers
9.8 Simplifying Expressions; Order of Operations

Chapter 10: Solving Equations and Inequalities

10.1 Solving Equations: The Addition Principle
10.2 Solving Equations: The Multiplication Principle
10.3 Using the Principles Together
10.4 Formulas
10.5 Applications of Percent
10.6 Applications and Problem Solving
10.7 Solving Inequalities
10.8 Applications and Problem Solving with Inequalities

Chapter 11: Graphs of Linear Equations

11.1 Graphs and Applications (Omit applications.)

Chapter 12: Polynomials: Operations

12.1 Integers as Exponents
12.2 Exponents and Scientific Notation
12.3 Introduction to Polynomials
12.4 Addition and Subtraction of Polynomials
12.5 Multiplication of Polynomials
12.6 Special Products
12.7 Operations with Polynomials in Several Variables
12.8 Division of Polynomials (monomial divisors only)

Chapter 13: Polynomials: Factoring

13.1 Introduction to Factoring
13.2 Factoring Trinomials of the Type $x^2 + bx + c$
13.3 Factoring $ax^2 + bx + c$, $a \neq 1$: The Foil Method
13.4 Factoring $ax^2 + bx + c$, $a \neq 1$: The ac Method
13.5 Factoring Trinomial Squares and Differences of Squares
13.6 Factoring: A General Strategy

Chapter 14: Rational Expressions and Equations

14.1 Multiplication and Simplifying Rational Expressions
14.2 Division and Reciprocals